

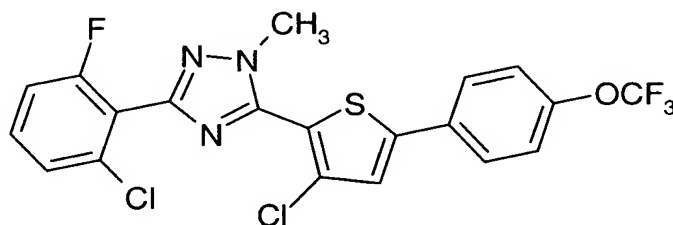
A complete set of amended claims and a marked-up copy of the original claims are attached for the convenience of the Examiner.

Remarks

Claims 1-21 are now in this application. Claims 1, 8 and 15 have been amended.

In confirmation of the telephone conversation with the Examiner on October 27, 2004, the applicants elect without traverse to prosecute Group 1 of claims 1-14, i. e., those compounds and compositions of the formula of claim 1 wherein R⁴ and R⁵ taken together do not form a 5- or 6- membered ring containing 1 or 2 oxygen atoms. Independent claims 1, 8 and 15 are amended to limit the claims to the elected Group 1.

The applicants elect the fourth compound on page 76, viz.,

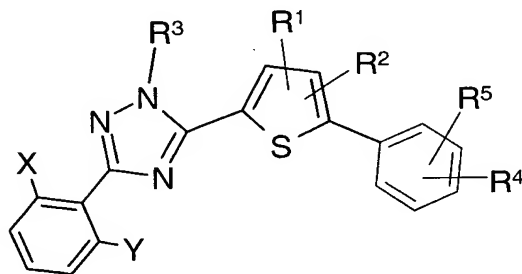


for search purposes.

Claim 15 stands rejected under 35 U.S.C. § 112, first paragraph for failing to comply with the written description requirement concerning the term “other sucking pests”. Claim 15, as well as Claim 8, which also contains this language, have been amended by deleting the objectionable terminology and by inserting the description “homoptera, hemiptera, thysanoptera, isoptera, orthoptera, diptera, hymenoptera, shiphonaptera or acarina” in its place. This amendment finds support at pages 90-91 of the specification. With this amendment, Claims 8 and 15 now comply with the requirements of 35 U.S.C. § 112, first paragraph.

Claims 1-21 stand rejected under 35 U.S.C. § 102 (b) as being anticipated by U. S. Patent 6,015,826 (Pechacek *et al.*). More particularly, the rejection states that compounds Nos. 23 and 29 of Pechacek *et al.* anticipate the compounds of the

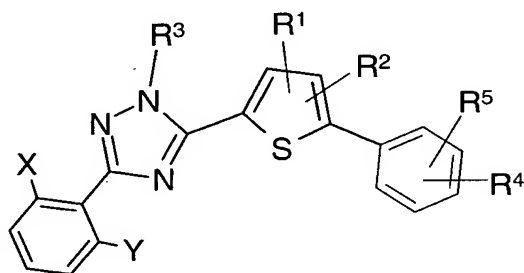
present invention wherein X and Y independently represent F, R³ represents methyl, R¹ and R² independently represent hydrogen and R⁴ and R⁵ independently represent H, Cl or OCH₃. Claim 1 represents compounds of the formula



wherein R¹ and R² independently represent H, C₁-C₆ alkyl or halogen, with the proviso that R¹ and R² are not both H. R¹ and R² cannot both be H as is the case for compound Nos. 23 and 29 of Pechacek *et al.* Therefore, Pechacek *et al.* does not anticipate the compounds of the present invention.

Claims 1-21 stand rejected under 35 U.S.C. § 103 (a) as being unpatentable over Pechacek *et al.* The rejection asserts that the difference between the instant claims and Pechacek *et al.* is that the instant compounds are isomers of Pechacek *et al.* In addition to being a particular isomer of the compounds disclosed in Pechacek *et al.*, the instant compounds require an additional substituent on the thiophene ring.

The present invention claims compounds of the formula



wherein

X and Y independently represent Cl or F;

R¹ and R² independently represent H, C₁-C₆ alkyl or halogen, provided that R¹ and R² are not both H;

R³ represents C₁-C₃ alkyl;

R⁴ represents halogen, C₁-C₆ alkyl, C₁-C₆ alkoxy, C₁-C₆ thioalkyl, C₃-C₆ alkoxyalkoxy, C₁-C₆ haloalkyl, C₁-C₆ haloalkoxy, C₁-C₆ halothioalkyl, C₃-C₆ alkenyloxy, or phenoxy;

R⁵ represents H, halogen or a C₁-C₆ alkyl ether or haloalkyl ether;
or a phytolegically acceptable acid addition salt thereof.

While the compounds of the present invention are generally embraced by the generic disclosure of Pechacek *et al.*, they are neither specifically taught nor suggested.

The compounds of the present invention are connected to the triazole ring at the 2-position of the thiophene ring and to a substituted phenyl group at the 5-position of the thiophene ring. In addition, the thiophene ring is substituted with at least one additional C₁-C₆ alkyl or halogen group. There is no suggestion that compounds connected to the triazole ring at the 2-position of thiophene ring, having a substituted phenyl group at the 5-position of the thiophene ring and having a C₁-C₆ alkyl or halogen group at the 4- or 5-position of the thiophene ring would have exceptional broad spectrum insecticidal activity and, especially, activity against lepidoptera. In fact, Pechacek *et al.* is totally silent about activity against lepidoptera.

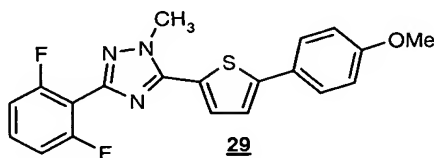
To more clearly demonstrate the unobviousness of the present invention over Pechacek *et al.* and the invention taught or suggested therein, the Applicants submit herewith an Affidavit by Dr. James E. Dripps.

This Rule 132 Affidavit is based on the test for unobviousness as set forth in *Ex parte Dole*, 119 USPQ 260. Since this test for unobviousness appears to be basic law today, and this decision has not been overruled or overturned, such test was employed.

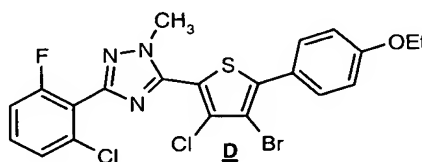
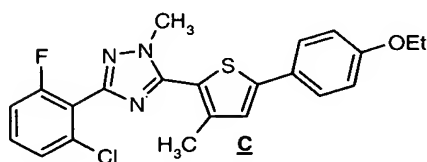
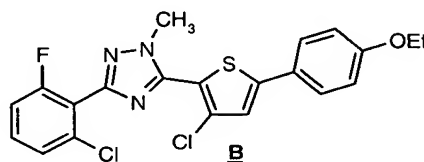
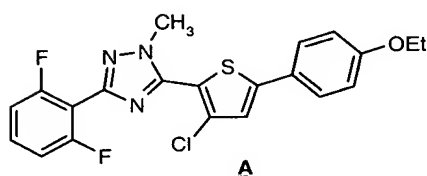
Ex parte Dole is directed to the same issue as in the present rejection. In essence, the Board, in this decision, set forth the requirements which must be met if patentable distinctions are to be found between analogous compounds. One such requirement is that the activity of the claimed compounds must be "unexpectedly advantageous" over that of the prior art compound. Another requirement is that any affidavit filed must set forth sufficient data (facts) to permit real evaluation, rather than it being based on unsupported statements of conclusion or opinion. The other

basic requirement made by the Board is that any advantage or area of advantage which is found or set forth must itself find support in the specification as filed.

As indicated hereinabove, the Rule 132 Affidavit of Dr. Dripps compares the insecticidal activity of four compounds of the present invention, viz., compounds A, B, C and D with the closest compound disclosed or suggested by Pechacek *et al.*, viz., compound No. 29.



Pechacek *et al.*



Compound A and compound 29 differ in the substitution at the 3-position of the thiophene ring (Cl vs. H) and the identity of the phenyl substituents (OEt vs. OMe). Compound B and compound 29 differ in the substitution at the 3-position of the thiophene ring (Cl vs. H), the identity of the phenyl substituents (OEt vs. OMe) and the identity of the substituent at the 6-position of the phenyl ring attached to the triazole ring (Cl vs. F). Compound C and the compound 29 differ in the substitution at the 3-position of the thiophene ring (CH₃ vs. H), the identity of the phenyl substituents (OEt vs. OMe) and the identity of the substituent at the 6-position of the phenyl ring attached to the triazole ring (Cl vs. F). Compound D and compound 29, differ in the substitution at the 3- and 4-positions of the thiophene ring (Cl, Br vs. H, H), the identity of the phenyl substituents (OEt vs. OMe) and the identity of the substituent at the 6-position of the phenyl ring attached to the triazole ring (Cl vs. F).

It is understood that any showing (data) set forth to rebut a presumption of obviousness over the prior art reference, must meet the requirements of *Ex parte Dole* and in addition must be sufficient to establish a difference in kind and not indicate a mere difference in degree.

The question which must be answered is whether or not a sufficient showing has been made in the affidavit presented herewith.

The affidavit of Dr. Dripps proves beyond a doubt the “unexpectedly advantageous” insecticidal properties of the present invention against *Lepidoptera*. As illustrated in the affidavit, Compounds A, B, C and D of the present invention exhibit excellent control of beet armyworm, a member of the lepidopteran order of insects, while the prior art compound 29 of Pechacek *et al.* has virtually no activity against beet armyworm.

It is to be further noted that the showings are direct comparisons of an active compound of the present claims and the most closely related compounds of the prior art. In all cases, the differences in activity shown are true differences in kind and not mere difference in degree.

The compound chosen for the comparative showing is (a) the closest compound taught by the prior art or (b) the closest compound within the generic disclosure of the prior art.

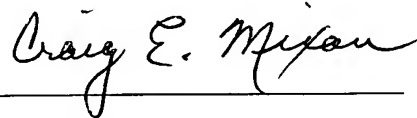
From the data presented in the Affidavit taken as a whole, it is established without question that the presently claimed compounds possess activity far and above the prior art compounds and the present invention is not anticipated by or obvious in view of Pechacek *et al.*

Claims 1-14 stand rejected under the judicially created doctrine of obviousness-type double patenting over claim 1 of U.S. Patent 6,770,665 (Hegde *et al.*). Hegde *et al.*, which is the parent application of the present application and is commonly owned by Dow AgroSciences LLC. A terminal disclaimer with request to Hegde *et al.* is being filed concurrently with this response. With the filing of the terminal disclaimer, the double patenting rejection is overcome.

On the basis of the above amendments and remarks, reconsideration of this application and its early allowance are requested.

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 04-1529 and please credit any excess fees to such deposit account.

Respectfully submitted,

A handwritten signature in cursive script, reading "Craig E. Mixan", positioned above a horizontal line.

Craig E. Mixan
Registration No. 32,709
Phone: (317) 337-4812

9330 Zionsville Road
Indianapolis, Indiana 46268